

LEA

CERAMICHE

Tender specifications | L2 collection

Supply of LEA Ceramiche porcelain stoneware tiles for walls and floors.

Product characteristics

LEA Ceramiche coloured-body porcelain stoneware tiles, unglazed, composed of a very fine mixture of quality clay with the addition of feldspar, quartz and kaolin, manufactured by dry pressing of atomized powders and subsequently sintered by industrial firing at temperatures above 1200°C. The complete vitrification of the tiles allows for a compact, non-absorbent, frost-proof product, resistant to bending, impacts, staining, chemical attack and thermal shock.

Compliance with EN 14411-G / ISO 13006-G

The SYSTEM L2 collection is in compliance with the regulations required for first quality products in Italy and Europe UNI EN 14411-G and internationally through ISO 13006-G.

Quality and environmental certifications

The conservation of the product characteristics is guaranteed by the Quality Management System put into practice by LEA Ceramiche in its plants and certified in accordance with UNI EN ISO 9001.

The collection is manufactured in plants with UNI EN ISO 14001 certified Environmental Management Systems (internationally recognized standard) and EMAS (Regulation CE 1221/09 - eco-management and audit community system).

The collection helps to meet the criteria for obtaining LEED credits. The content of "pre-consumer" recycled material is 40%, as certified by a qualified external body (LEED V4 Regulations - MR Credit).

The product contains no VOC (volatile organic compounds) and got the GREENGUARD GOLD certification.

The Environmental Product Declaration (EPD) is available, this tool communicates clearly the environmental performances of the SYSTEM L2 collection based on its Life Cycle Assessment (LCA).

For all the items in the collection, the calculation of the carbon footprint (PCF) over the entire life cycle is available, expressed as CO₂ equivalent per unit of product, certified according to ISO 14067. The collection complies with the technical specifications and contractual conditions applicable to porcelain stoneware outlined in the Ministerial Decree of 23 June 2022 "Minimum environmental criteria for the contracting of the design and execution of works for building projects".

Commercial description of the product

Company	LEA CERAMICHE (Panariagroup Industrie Ceramiche S.p.A.)
Collection	L2
Colours	INTENSE: INTENSE TOFFEE L2, INTENSE BEIGE L2, INTENSE CLAIR L2, INTENSE PERLE L2, INTENSE CRETE L2 ANTHOLOGY: 01 WHITE L2, 02 DESERT L2, 03 EARTH L2, 04 GRAY L2, 05 DARK L2 SIDE STONE: CLUSTER LIGHT L2, CLUSTER MID L2, CLUSTER DARK L2 NEXTONE: NEXT WHITE L2, NEXT GRAY L2, NEXT TAUPE L2, NEXT DARK L2 WATERFALL: IVORY FLOW L2, SILVER FLOW L2, GRAY FLOW L2, DARK FLOW L2 CONCRETO: CONCRETO EXTRA LIGHT L2, CONCRETO LIGHT L2, CONCRETO MEDIUM L2 MASTERPIECE: MASTER WHITE L2, MASTER SAND L2, MASTER GRAY L2, MASTER COAL L2
Sizes	45x90 cm Rect (IVORY FLOW L2, SILVER FLOW L2, GRAY FLOW L2, DARK FLOW L2)
	60x60 cm Rect (NEXT WHITE L2, NEXT GRAY L2, NEXT TAUPE L2, NEXT DARK L2, IVORY FLOW L2, SILVER FLOW L2, GRAY FLOW L2, DARK FLOW L2)
	60x120 cm Rect (INTENSE TOFFEE L2, INTENSE BEIGE L2, INTENSE CLAIR L2, INTENSE PERLE L2, INTENSE CRETE L2, 01 WHITE L2, 02 DESERT L2, 03 EARTH L2, 04 GRAY L2, 05 DARK L2, CLUSTER LIGHT L2, CLUSTER MID L2, CLUSTER DARK L2, NEXT WHITE L2, NEXT GRAY L2, NEXT TAUPE L2, NEXT DARK L2, MASTER WHITE L2, MASTER SAND L2, MASTER GRAY L2, MASTER COAL L2)
	90x90 cm Rect (IVORY FLOW L2, SILVER FLOW L2, GRAY FLOW L2, DARK FLOW L2, CONCRETO EXTRA LIGHT L2, CONCRETO LIGHT L2, CONCRETO MEDIUM L2)
Surfaces	GRIP, ROUGH
Edges	RECTIFIED (RECT)
Thickness	L2-20mm



ISO 9001

ISO 14001

EMAS

GREENGUARD GOLD

LEED

LEED

EPD

CFP

RECYCLED MATERIALS

CRITERI AMBIENTALI MINIMI

LEA

CERAMICHE

Tender specifications | L2 collection

Technical features

Product type: coloured-body porcelain stoneware (UGL)

According to: ISO 13006-G (Group Bla), EN 14411-G (Group Bla)

Technical features		Test method	Required values ISO 13006-G / EN 14411-G Bla-UGL Group	Average values SYSTEM L2
Water absorption		ISO 10545-3	≤ 0,5%	0,05%
Breaking strength (S)		ISO 10545-4	≥ 1300 N	Thickness 20 mm: 13600 N
Modulus of rupture		ISO 10545-4	≥ 35 N/mm ²	50 N/mm ²
Deep abrasion resistance		ISO 10545-6	≤ 175 mm ³	145 mm ³
Linear thermal expansion		ISO 10545-8	No provision	$\alpha \leq 7 \cdot 10^{-6} \text{ }^{\circ}\text{C}^{-1}$
Stain resistance		ISO 10545-14	Class 3 min.	5 RESISTANT
Chemical resistance (*)		ISO 10545-13	As indicated by manufacturer	LA, HA RESISTANT
Frost resistance		ISO 10545-12	No alteration	RESISTANT
Dimensions	Lenght and width	ISO 10545-2	RECT ± 0,3%, max ± 1 mm	COMPLIANT
	Straightness of sides	ISO 10545-2	RECT ± 0,3%, max ± 0,8 mm	COMPLIANT
	Rectangularity	ISO 10545-2	RECT ± 0,3%, max ± 1,5 mm	COMPLIANT
	Warpage	ISO 10545-2	RECT ± 0,4%, max ± 1,8 mm	COMPLIANT
	Thickness	ISO 10545-2	RECT ± 5%, max ± 0,5 mm	COMPLIANT
Slip resistance		DIN EN 16165 - Annex B	-	R11 (GRIP L2-20mm, ROUGH L2-20mm)
		DIN EN 16165 - Annex A	-	C (GRIP L2-20mm, ROUGH L2-20mm)
		BCR-TORTUS	-	$\mu > 0,40$ (GRIP L2-20mm, ROUGH L2-20mm)
		ANSI A326.3	-	EW (GRIP L2-20mm, ROUGH L2-20mm)
		AS/NZS 4586	-	P4 (GRIP L2-20mm, ROUGH L2-20mm)
		BS EN 16165 - Annex C	-	PTV 36+ Wet (Sl.96 - Sl.55): GRIP L2-20mm, ROUGH L2-20mm
Shade variation		ANSI A 137.1	As indicated by manufacturer	V2 (INTENSE TOFFEE L2, INTENSE BEIGE L2, INTENSE CLAIR L2, INTENSE PERLE L2, INTENSE CRETE L2, MASTER WHITE L2, MASTER SAND L2, MASTER GRAY L2, MASTER COAL L2) V3 (01 WHITE L2, 04 GRAY L2, CONCRETO EXTRA LIGHT L2, CONCRETO LIGHT L2, CONCRETO MEDIUM L2, NEXT WHITE L2, NEXT GRAY L2, NEXT TAUPE L2, NEXT DARK L2, IVORY FLOW L2, SILVER FLOW L2, GRAY FLOW L2, DARK FLOW L2) V4 (02 DESERT L2, 03 EARTH L2, 05 DARK L2, CLUSTER LIGHT L2, CLUSTER MID L2, CLUSTER DARK L2)
Fire reaction		EN 13823	CPR (UE) 305/2011, 2000/147/CE, UNI EN 13501-1	Class A1 (wall)
		EN 9239-1		Class A1 _f (floor)
Thermal conductivity		EN 12524	-	$\lambda = 1,3 \text{ W/m }^{\circ}\text{K}$
Recommended minimum joint (**)		Outdoor	-	5-6 mm approx

(*) Excluding hydrofluoric acid and its derivatives.

(**) The width of grout joints must be established by the installation supervisor, unless grout widths are regulated by national laying standards.



ISO 9001

ISO 14001

EMAS

GREENGUARD GOLD

LEED

LEED

EPD

CFP

RECYCLED MATERIALS

CRITERI AMBIENTALI MINIMI